Claims:

5

10

- 1. An implantable prosthesis for the repair of muscle wall defects, the prosthesis comprising a flexible plug of a surgically compatible mesh material, characterised in that the plug has an elongate form with one portion at least of the surface of the plug forming a projecting longitudinal ridge or bulge.
- An implantable prosthesis in accordance with claim 1, wherein the said portion of the surface of the plug comprises a projecting lobe formed by, or on, the surface.
 - 3. An implantable prosthesis in accordance with claim 1 or 2 wherein the plug has a prismatic shape with a generally triangular cross-section.
 - 4. An implantable prosthesis in accordance with any preceding claim, wherein the cross-section of the plug has a three lobed profile.
- 5. An implantable prosthesis in accordance with claim 4, modified in that more than three lobes, or ridges, are provided.
 - 6. An implantable prosthesis in accordance with claim 4 or 5, wherein the apices of the lobes are joined by linear sides, providing a generally triangular cross-section.
- 7. An implantable prosthesis in accordance with any preceding claim, wherein the elongate mesh material forming the plug has internal longitudinal webs to support the profile of the mesh.
 - 8. An implantable prosthesis in accordance with claim 7, wherein the webs

- are an integral part of the mesh configured by folding or formed by separate parts bonded to the inner surface of the outer profile.
- 9. An implantable prosthesis in accordance with any preceding claim, wherein three, or more, elongate sub-units are connected to form the prosthesis, said sub-units preferably being of a triangular profile.

5

15

- 10. An implantable prosthesis in accordance with any preceding claim, wherein the wall of the mesh is pleated circumferentially, or longitudinally to provide a degree of flexibility and compressibility, to facilitate placement into a defect comprising a hernia.
- 11. An implantable prosthesis in accordance with any preceding claim, adapted whereby the mesh plug may be cut to an appropriate required dimension from a stock length piece.
 - 12. An implantable prosthesis in accordance with any preceding claim, formed by a plurality of individual units connected in a longitudinal side-by-side relationship, preferably with such units individually have a prismatic profile.
 - 13. An implantable prosthesis in accordance with any preceding claim, modified whereby the plug has an open side being in the form of a triangular profiled trough, the shape being maintained by an internal support formed by mesh material.
- 14. An implantable prosthesis in accordance with any preceding claim, wherein the mesh material comprises polypropylene with jointing, if required, achieved by heat sealing.
 - 15. The use of an implantable prosthesis in accordance with any preceding claim for the treatment of elongate or rectangular openings such as are

WO 2004/062530 PCT/GB2004/000078

found with i/nguinal hernia defects.

16. An implantable prosthesis as described herein and exemplified with reference to the drawings.